

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## Patent Application

IAP20 Rec'd PCT/PTO 22 DEC 2005

Applicants(s): Robert John Kopmeiners

Tim Schenk

Allert Van Zelst

Case: Kopmeiners 8-3-4

Serial No.: Unassigned

Filing Date: Concurrently Herewith

Group: Unassigned

Examiner: Unassigned

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Signature: Gene Mawit Date: December 22, 2005

Title: Methods and Apparatus for Backwards Compatible Communication in a Multiple Antenna Communication System Using Time Orthogonal Symbols

---

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, Applicant's attorney wishes to bring to the attention of the Patent and Trademark Office the following document listed on the accompanying PTO Form 1449.

U.S. Patent Application(s)

1. U.S. Patent Application Publication No. 2003/016621

A copy of the listed item is enclosed.

Other Documents

2. Shin et al., "A New Training Symbol Structure to Enhance the Performance of Channel Estimation for MIMO-OFDM Systems," IEEE International Conference on Acoustics, Speech, and Signal Processing Proceedings (ICASSP), Vol. 1 of 6, pgs. IV397-IV400 (April 6, 2003).
3. Sun et al., "Training Sequence Assisted Channel Estimation for MIMO OFDM," Wireless Communications and Networking, pgs. 38-43 (March 16, 2003).

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or as an admission that the information cited is considered to be material to patentability or that no other material information exists.

10/562620

Kopmeiners 8-3-4

IAP20 Rec'd PCT/PTO 22 DEC 2005

In the event of any non-payment or improper payment of a required fee, the Commissioner is hereby authorized to charge or to credit **Deposit Account No. 50-0762** as required to correct the error. A duplicate copy of this letter is enclosed.

Respectfully submitted,



Date: December 22, 2005

Kevin M. Mason  
Attorney for Applicant  
Reg. No. 36,597  
Ryan, Mason & Lewis, LLP  
1300 Post Road, Suite 205  
Fairfield, CT 06824  
(203) 255-6560

Applicant: Robert John Kopmeiners  
 Tim Schenk  
 Allert Van Zelst  
 Case: Kopmeiners 8-3-4  
 Serial No.: Unassigned  
 Filing Date: Concurrently Herewith  
 Group: Unassigned

**LIST OF PUBLICATIONS FOR  
 APPLICANT'S INFORMATION  
 DISCLOSURE STATEMENT**

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS/SUBCLASS	FILING DATE IF APPROPRIATE
/C.E./	2003/016621	01/23/03	Li	370/203	05/21/01

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NO.	DATE	COUNTRY	CLASS/SUBCLASS	TRANSLATION YES NO	
---------------------	--------------	------	---------	----------------	-----------------------	--

**OTHER DOCUMENTS**

EXAMINER INITIAL	REF NO.	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
/C.E./		Shin et al., "A New Training Symbol Structure to Enhance the Performance of Channel Estimation for MIMO-OFDM Systems," IEEE International Conference on Acoustics, Speech, and Signal Processing Proceedings (ICASSP), Vol. 1 of 6, pgs. IV397-IV400 (April 6, 2003).
/C.E./		Sun et al., "Training Sequence Assisted Channel Estimation for MIMO OFDM," Wireless Communications and Networking, pgs. 38-43 (March 16, 2003).

/Candal Elpenord/

12/18/2007

Examiner

Date Considered

**Examiner:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.